Shaping Global Criticality with School Libraries

Keith McPherson

Doctoral student, University of Victoria, Canada

This article presents the unique online learning contexts and content in which Net generation students are currently engaging, and challenges school libraries to take a different approach to literacy instruction. More specifically, it explores the role school libraries can play in developing information literacy curriculum that enables students to cope with rapid changes in multimodal forms of communication, while fostering critical thinking skills that offset students' risky online surfing behaviours. Current research and literacy theory supporting the incorporation of multiliteracy pedagogy and critical thinking in school library curriculum is examined. Practical activities for cultivating these skills in students are presented. And a discussion of the positive effects that multiliteracy and multimodality instruction in the school library can have for each student is imagined for their global futures.

One key goal for most school libraries is the development of students' critical thinking and communication skills. Whether it is developing students' abilities to determine the authority of an author of a content area text, or helping students critique the ethical implications of information on a webpage, school librarians have taken a leadership role in developing students' abilities to critically engage with a variety of information and resources across a diverse set of contexts.

However, over the past decade, there has been a rapid and dramatic shift in the types of resources and contexts that students access. More specifically, students are gravitating towards more culturally and linguistically diverse Internet-based communication technologies and information that often require new and sophisticated critical thinking skills and communication abilities.

Acknowledging the strong role school libraries have always played in developing students' communication and critical thinking skills, this article builds an argument for an expanded role for school libraries in the development of literacy curriculum that acknowledges today's rapidly changing information communication contexts, seeks to help students communicate and participate safely and fully in these new environments, and which leads to the development of a new *global criticality*[i].

New Literacy Learning Content and Contexts

The past 25 years have been characterized by rapid changes in the social, cultural, and economic fabrics of many countries around the globe. According to literacy theorists (New London Group, 1996; Lankshear & Knobel, 2003), these changes can be largely attributed to globalization[ii] and the proliferation of information communication technologies [ICTs][iii].

The creation of new and constantly changing globally networked ICTs has made possible the social networking of humans around the world and the convergence and divergence of thought, capital, culture, and communications (Leu, 2001). Many elementary and secondary students are attracted to, and participate in, these new digital social networks (Kiss, 2007; National School Board Association, 2007; Lenhart & Madden, 2007). The Organisation for Economic Co-operation and Development (2006) identified a global trend in students' increased access and usage of information communication technologies both in and out of school from 2001 to 2005. Of the 15-year-old students surveyed from 41 participating countries, more than 90% reported they had used a computer, and 53% reported they used the Internet regularly. Additionally, the report indicated that even though children from developed countries were far more likely to access ICTs at home than children from developing countries, the latter were increasingly obtaining access through schools, libraries, Internet cafés, and other learning technology initiatives (see One Laptop Per Child, 2007; Trucano, 2007; The World Bank, 2007).

This global trend towards increased numbers of students accessing ICTs has created some new and different language and literacy learning contexts and content. For example, a Canadian study (Media Awareness Network, 2005) surveyed the computer habits of over 5,000 randomly selected students aged 9-17 and found that:

- 94% of respondents used their computer to access the Internet from home,
- 91% percent of 13-year-olds preferred accessing Internet resources over print-bound books when doing homework,
- 68% indicated they required more instruction on how to determine the authenticity of online information,
- 34% reported being bullied and 12% were sexually harassed over the Internet,
- 33% of students' top 50 favourite websites incorporated material that was violent (28%) or highly sexualized (32%),
- 94% of the students' top 50 favourite websites included marketing material,
- 75% of respondents were unaware of advertising incorporated into the online product-centred games they were playing.

Although students are often stereotyped as being more 'tech savy' than most educators and parents, this study found that almost 70% of the students still desired assistance from others in determining the authenticity of online information and communications. Also interesting is that although these findings were not indicative of computer habits for students around the globe, research from other countries revealed similar data (e.g., Australian Institute of Criminology, 2006; Berson & Berson, 2003; European Commission, 2006; Garlick, 2007a, 2007b [video]; Rideout, 2007; Liau, Khoo, & Hwaang, 2005; Weiss, 2005; Ybarra, Mitchell, Finkelhor & Wolak, 2007).

However, what is becoming apparent from these findings about our students' current literacy practices is that: 1) they are shifting away from printed books towards digitized, socially networked Internet-based information and media; 2) they are accessing unregulated online content and engaging in 'risky' communication contexts; and 3) they still require direction from mentors and teachers, like school librarians, in the development of appropriate online critical thinking and communication skills.

Multiliteracies and Critical Engagement

Many of the print-based literacy skills that school librarians teach students are as important, if not more important, to access when surfing the Internet (McPherson, 2005). Basic reading and writing skills, for example, are crucial for obtaining information from most webpages. Similarly, understanding the principles of using a book's table of contents can greatly assist in learning the effective use of online pull-down menus (and vice versa).

On the other hand, our students' preference to access, create and disseminate digitized information and communications, especially on the Internet, requires students to develop literacies in two profoundly distinct manners. First, because globally networked ICTs allow and encourage students to convey and recover meaning and information from a variety of re/combining and ever-changing symbol systems (e.g., music, collages, drama, reading, dance, speaking, writing, listening, painting, drawing, photography, video, animation, hypertext), students will not only need to learn how to master reading and writing, but also learn how to communicate–to compose, to problem solve, and understand–across a wider set of culturally diverse and multiple meaning making forms[iv] (Leyland & Harste, 1994; Kress 2003, 2004).

For example, a growing number of students will find themselves entering jobs in which their ability to use ICTs to facilitate communication across and between multiple languages and cultures will be crucial to their success in integrating and promoting their product or service into very different economic and sociocultural locations around the world (Gee & Lankshear, 1997; Luke, Luke & Graham, 2007). Similarly, students who wish to assist in global relief efforts, like that required in the December 24, 2004 tsunami disaster, will require multiple meaning making skills and tools necessary to understand and negotiate unique cultural patterns, traditions, beliefs, languages and literacies in an effort to expedite effective relief efforts (Bada Math et al., 2006).

Furthermore, by developing our students' multiliteracies (the ability to use a variety of symbol systems to converse across and between linguistically and socioculturally diverse contexts), we also enable students to move beyond developing a narrow set of analytical and rational thinking processes and values perpetuated in a curriculum emphasizing the mastery of reading and writing (Greene, 1997; Eisner, 1997). Students with multiliteracy backgrounds are able to access larger sets of communication forms, are more likely to represent what they wish to say, are able to understand a broader set of communications from other people, and are more likely to contribute positively to society.

A second literacy Net generation students will need to be taught is critical literacy. But what is meant by this term? And why is critical literacy important for students engaging in online literacy and learning contexts?

In this article, I draw upon critical literacy theory presented by the New London Group (1996, ¶ 91) to define the term critical literacy. Essentially these authors believe the goal of critical literacy is to teach students process-oriented thinking habits that "denaturalize and make strange again what [the students] have learned and mastered"[vi]. Through this reflective process, "learners can gain the necessary personal and theoretical distance from what they have learned, constructively critique it, account for its cultural location, creatively extend and apply it, and eventually innovate on their own, within old communities and new ones" (¶ 93).

Thus critically literate students are learners who actively and independently reflect upon and question the assumptions, goals, views, relations, policies, practices, and structures operating in human social, political, and economic systems ranging from the micro level (e.g., student's private life and local communities) to the macro level (e.g., provincial, national and international communities). The key goal of these reflections and questions is to actively understand and overcome all forms of social, political, and economic oppression, inequalities, and injustices.

Developing one's critical literacy is essential for engaging with unregulated digitized information and communication like that found on the Internet. Take, for example, the research data presented earlier outlining the online behaviours of Canadian students. Some students visited and viewed websites containing highly sexualized and violent content, many were bullied or sexually harassed, and the majority were exposed to advertising of a commercial nature. Students who engage uncritically with such unregulated content and contexts run the very real risk of learning and ingraining such social practices in themselves, while strengthening the sociocultural structures responsible for perpetuating sexism, violence, and thoughtless consumerism. Even more disturbing, students who surf the Internet without such critical thinking skills are more vulnerable to being victimized in associated Internet crimes (e.g., Australian Institute of Criminology, 2007; Carvajal, 2007; Cybertip!ca, 2008; U.S. Department of Justice, 2005; Virtual Global Taskforce, 2007a, 2007b [video]).

Students with well developed critical literacy abilities are also better prepared to work, live and play peacefully and successfully within today's growing intersections of politically, economically, culturally and linguistically diverse communities found both on and offline. This is because critically literate students are open to viewing today's 'plurality of difference' as a new productive resource for developing greater equality and social cohesiveness (Kalantzis & Cope, 2006). Furthermore, such students seek to challenge and transform unjust, monolithic, and hegemonic imbalances of power through the process of negotiation and democratic process in order to uphold individual human rights and encourage equitable access to a wider range of cultural and institutional resources (Martusewicz & Reynolds, 1994, pp. 6-7).

Developing Multiple and Critical Literacies

Historically, school librarians have played an important leadership role in students' mastery of reading and writing print-bound text. Although these skills are still essential for negotiating the new contexts and content with which learners engage today, school librarians must now play an even stronger leadership role in developing students' multiple and critical literacies. The following is a brief list of recommendations and links to suggested activities, lesson plans, and relevant information that school librarians can use to begin cultivating these two 'new' literacies with/within their students:

Multiliteracies

1. Take a leadership role in developing and implementing multiliteracy and critical literacy curriculum
   a. Flood, Heath and Lapp (2007) This volume explores the research into multiliteracy instructions and learning and the associated and evolving roles of teacher as transmitter to teacher as mentor and co-learner. An excellent read for

school librarians wishing to explore new philosophies and pedagogies in literacy instruction, with an emphasis on student centred and engaged learning.

2. Develop school library activities and curriculum that allow students to actively and interactively explore a variety of meaning-making forms and learning technologies-- not just reading and writing.
    a. [Lesson Plans 1](#) (Centre for Media Literacy: 5-18 year-olds). Unlike the 6-W questions (who, what, when, where, why, and how) that are largely geared towards uncovering 'facts', these lesson plans help school librarians develop students' ability to actively and independently examine, understand, and reject or accept the construction of intent in messages for a variety of media, including music, video, and photography.
    b. [Lesson Plans 2](#) (Media Awareness Network: 5-18 year-olds). These "probing-approach" lesson plans encourage K-12 students to develop the vocabulary and skills required to interrogate all forms of communication media ranging from text to movies. For example, one lesson plan encourages students to explore the role facial features and skin color play in photographs, and how these can be used to promote prejudiced and/or racial messages.

3. Provide students and teachers access to as diverse a set of resources and meaning-making tools in the school library as possible ([International Federation of Library Association, 2000, p 8](#)).

4. Develop a respectful risk-free learning environment in which students feel comfortable bringing some of their own non-traditional out-of-school literacies into the library (e.g., social networking websites)
    a. [Ward & Wason-Ellam, 2005](#) In this ethnographic study, the authors explore the variety of institutional and informal literacies that patrons brought and used in a community public library. The authors noted that a wide set of resources and low risk communication contexts encouraged patrons' use of formal and informal literacies. Excellent article for those wishing to begin exploring the role libraries have in facilitating multiliteracies.
    b. [Social Networking Tool Kit](#) (Young Adult Library Services Association, 2007). A handbook for secondary school librarians wanting to understand how social networking can facilitate learning in schools and school libraries, and how stakeholders can be educated in its implementations and use.

Critical Literacy

1. Develop an acceptable use policy for the Internet with your students:
    a. [Acceptable Use Policies Handbook](#) (Virginia Department of Education, 2007). A thorough overview of the many components and considerations that should go into the development of an AUP. The particular strength of this document is in its emphasis on encouraging students to participate in developing policy statements and enforceable rules.

2. Minimize filtered access to the Internet in accordance with school, parental, and legal rules and regulations.

3. Help students refine their abilities to authenticate online information:

      a. [Quality information checklist](#) (8-13 year-olds). One of the few checklists written for elementary children supported by clear visuals.

      b. [Knowing what's what and what's not](#) (12-17 year-olds).

      c. [The Internet detective](#) (18 year-olds).

4. Provide age-appropriate activities that teach students how to actively ask critical questions in all aspects of their lives and who make democratic decisions from the resulting information:

      a. [Activity 1](#) (Investigating junk mail: 8-10 year-olds). Students investigate the multiple approaches and media that organizations use to "sell" their product or service. In the extensions, students use their evaluations and understandings to create their own junk mail or take social action against/in support of junk mail. Note how this activity encourages critical engagement with material as well as exploration of communication through text and other communicative media like photos, email, video etc.

      b. [Activity 2](#) (Critical analysis of popular television: 8-13 year-olds).

      c. [Activity 3](#) (Deconstructing YouTube: 14-17 year-olds). In this lesson plan, students are asked to critically review several Public Service Announcements (PSA) in an effort to understand successful communication practices in such audio-visual media. Students are asked to create their own audio-visual PSA using criteria from effective professional examples.

      d. [Activity 4](#) (Reading media photographs: 14-17 year-olds).

      e. [Activity / lesson plan collection](#) (Engaging critically with advertising: 12-17 year-olds). Lesson plans encouraging students to deconstruct and understand messages in old (e.g, T.V. and radio) and new (video games and cell phones) communication technologies. Emphasis is on developing students' awareness on how visuals are 'written' and 'read' to market products and acculturate the public locally, nationally, and globally.

Reaching Global Criticality

The unique learning contexts and content in which our students are engaging today challenge school libraries to take a different approach to literacy instruction. I argue that, at the micro level, school librarians must heighten their leadership role in teaching students the multiliteracy and critically literacy skills necessary to participate effectively in today's multilinguistic, multicultural and multimodal communication environments, and to avoid falling victim to the risks associated with unvetted information.

Although concerted efforts to develop these literacies through the school library are not yet occurring at the macro level, I also argue that the collective efforts of school libraries at the micro level has the very real potential to shape our global future in exciting and unrealized ways. Imagine the collective impact that our students' critical literacy skills could have on global power struggles, famine, child labour, global over-fishing, and a host of other social, political, environmental, and economic injustices. Imagine the understandings, social harmony, and equity that would surface as our globally networked students consciously and actively

embraced linguistic and cultural pluralism, human rights, and democratic process in place of hegemonic, monolinguistic, monocultural, nationalistic mindsets and institutions. Imagine.

School libraries worldwide can and must continue to play a large role in developing students' critical literacy mindsets and multiliteracy abilities. For it is through such collective efforts that these imaginations can be realized, and a compassionate, just, and ethical global criticality will be nurtured.

Notes

[i] Global criticality is a term I use to describe a grassroots movement led by a growing body of networked people (or networks of people) who have been taught, and who have developed, the critical habits of mind and communication skills required to collaboratively forge connected and compassionate understandings between and across local and global social/cultural networks of like-minded individuals whose intentions and actions are geared towards overcoming a wide variety of social and environmental injustices.

[ii] Globalization is defined as the process in which the world's political, technological, sociocultural, and economic forces function to unify the people of the world into a single society.

[iii] ICTs are defined to include both the software and hardware supporting the creation and dissemination of, and access to, information and communication of a textual, aural, and visual nature. Examples include the hardware and software supporting information communications using computers, the Internet, video recording/playing, wikis, cell phones, palm pilots, smart boards, podcasts, etc.

[iv] Multiple meaning forms includes *all* forms of human representation and communication such as language (reading writing, speaking, listening, hearing), drawing, music, gestures, dance, photos, video, animated graphics, painting, etc.

[v] According to the New London Group, making "something strange again" means to consciously interrogate and develop new understandings of one's "historical, social, cultural, political, ideological, and value-centered relations of particular systems of knowledge and social practice".

References

Australian Institute of Criminology. (2007). *Cybercrime: Online grooming, exploitation and sexual abuse of children*. Canberra, Australia: Australian Institute of Criminology. Retrieved January 4, 2008, from http://www.aic.gov.au/institute/contact.html

Bada Math, S., Girimaji, S.C., Benegal, V., Uday Kumar, G.S., Hamza, A., & Nagaraja, D. (2006). Tsunami [relief]: Psychosocial aspects of Andaman and Nicobar islands. Assessments and intervention in the early phase. *International Review of Psychiatry, 18*(3), 23-239.

Berson, I.R., & Berson, M.J. (2003). Challenging online behaviors of youth: Findings from a comparative analysis of young people in the United States and New Zealand. *Social Science Computer Review*, 29-38. Retrieved December 31, 2008, from http://ssc.sagepub.com/cgi/content/abstract/23/1/29

Carvajal, D. (2007, August). Fighting antisocial behavior on social networking sites. *International Herald Tribune*. Retrieved January 6, 2008, from http://www.iht.com/articles/2007/08/19/business/social20.php

Centre for Global Studies. (2007). *The tsunami disaster* [December 26th, 2005] *and the globalization of relief: A forum*. Retrieved from the University of Illinois National Resource Centre Server on December 6, 2007, from http://www.cgs.uiuc.edu/about/Events/Globalr.html

Cybertip!ca. (2008). *National Campaign: Not in the loop?* [Canadian Internet Crime's Internet safety brochures]. Retrieved January 7, 2008, from http://www.cybertip.ca/en/cybertip/national campaign/

Eisner, E. (1997). Cognition and representation: A way to pursue the American dream? *Phi Delta Kappan, 78* (5), 349-353.

European Commission. (2006). *Safer Internet for children: Qualitative study in 29 European countries – Summary report*. (Report No. Qualitative Study-Optem). Versailles, France: Optem. Retrieved January 7, 2008, from http://ec.europa.eu/information_society/activities/sip/docs/eurobarometer/ qualitative_study_2007/summary_report_en.pdf

Flood, J., Heath, S.B., & Lapp, D. (Eds.). (2007). *Research on teaching literacy through the communicative and visual arts: A project of the International Reading Association*. Mahwah, NJ: Lawrence Erlbaum Associates.

Garlick. (2007a). *UK kids take online risks behind closed doors* (Garlick press release, May 31, 2007). Retrieved January 7, 2008, from the Garlick web server http://www.garlick.com/press/Garlik Press Release - Kids at Risk.doc

Garlick. (2007b). *Kids at risk* [online video]. Retrieved January 7, 2008, from http://www.garlik.com/ video.php?v=1

Gee, J.P., & Lankshear, C. (1997). Language, literacy, and the new work order. In C. Lankshear (Ed.), *Changing Literacies* (pp. 83-102). Philadelphia, PA: Open University Press.

Greene, M. (1997). Metaphors and multiples: Representation, the arts, and history. *Phi Delta Kappan, 78* (5), 387-394.

Hobbs, R. (2001, April). Classroom strategies for exploring realism and authenticity in media messages. *Reading Online, 4*(9). Retrieved January 7, 2008, from http://www.readingonline.org/newliteracies/ lit_index.asp?HREF=/newliteracies/hobbs/index.html

Kalantzis, M., & Cope, B. (2006). On globalization and diversity. *Computers and Composition, 23*(4), 402-411. doi:10.1016/j.compcom.2006.09.002

Kiss, J. (2007, Jan). Most teens are MySpacers. *Guardian Unlimited*. Retrieved January 4, 2008, from http://www.guardian.co.uk/media/2007/may/17/digitalmedia.socialnetworking

Kress, G.R. (2003). *Literacy in the new media age*. London: Routledge.

Kress, G.R. (2004). Reading images: Multimodality, representation and new media. In P. Storkerson & E. Kazmierczak (Co-chairs), *Expert forum for the future of knowledge presentation*. Presentation given and paper presented at the Preparing for the Future of Knowledge Presentation IIID. Retrieved January 5, 2008, from http://www.knowledgepresentation.org/BuildingTheFuture/Kress2/ Kress2.html

Lankshear, C., & Knobel, M. (2003). *New Literacies: Changing knowledge and classroom learning*. Philadelphia: Open University.

Lenhart, A., & Madden, M. (Eds.). (2007). *Pew Internet Project Data Memo: Social networking websites and teens, an overview*. Retrieved from the Pew Internet & American Life Project Website on January 5, 2008, from http://www.pewinternet.org/pdfs/PIP_SNS_Data_Memo_Jan_2007.pdf

Leu, D.J., Jr. (2001, March). Internet Project: Preparing students for new literacies in a global village [Exploring Literacy on the Internet department]. *The Reading Teacher, 54*(6). Retrieved from the Internet from the International Reading Association server from http://www.readingonline.org/ electronic/elec_index.asp?HREF=/electronic/RT/3-01_Column/index

Leyland, C.H., & Harste, J.C. (1994). Multiple ways of knowing: Curriculum in a new key. *Language Arts, 71*, 337-345.

Liau, A.K., Khoo, A., & Hwaang, P. (2005). Factors influencing adolescents' engagement in risky Internet behavior. *CyberPsychology & Behaviour, 8*, 513-520.

Luke, A., Luke, C., & Graham, P. (2007). Globalization, corporatism, and critical language education. *International Multilingual Research Journal, 1*(1), 1-13. Retrieved December 31, 2007, from http://www.leaonline.com/doi/abs/10.1207/s19313160imrj0101_1?journalCode=imrj

Martusewicz, R.A., & Reynolds, W.M. (1994). *Inside/out: Contemporary critical perspectives in education*. New York: St. Martin's Press.

Math, S.B, Girimaji, S.C., Benegal, V., Uday, K.G., Hamza, A., & Nagaraja, D. (2006). Tsunami: Psychological aspects of Andaman and Nicobar islands. Assessments and intervention in the early phase [of relief]. *International Review of Psychiatry, 18*(3), 233-239.

McPherson, K. (2005). Literacy links: Online information literacy: Moving from the familiar to the new. *Teacher Librarian, 33*(1), 69-70.

Media Awareness Network. (2005). *Young Canadians In A Wired World Survey: Phase II*. Retrieved January 1, 2008, from http://www.media-awareness.ca/english/research/YCWW/phaseII/

National School Board Association. (2007). *Creating & connecting: research and guidelines online social – and educational – networking*. Retrieved January 6, 2008, from http://www.nsba.org/site/docs/41400/41340.pdf

New London Group, The. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 6*(1). Retrieved January 2, 2008, from http://wwwstatic.kern.org/filer/blogWrite44ManilaWebsite/paul/articles/A_Pedagogy_of_Multiliteracies_Designing_Social_Futures.htm

One Laptop Per Child. (2007). *One laptop per child* [Internet homepage and mission statement]. Retrieved December 17, 2007, from http://laptop.org/en/index.shtml

Organisation for Economic Co-operation and Development. (2006). *Are students ready for a technology-rich world?: What PISA* [Programme for International Student Assessment Studies] *tells us*. Retrieved December 17, 2007, from the Organisation for Economic Co-operation and Development web sever http://www.oecd.org/document/21/0,3343,en_32252351_32236173_36161109

Rideout, V. (2007). *Parents, children & media: A Kaiser Family Foundation survey*. Retrieved December 16, 2007, from http://www.kff.org/entmedia/upload/7638.pdf

The World Bank. (2007). *World development report: Development and the next generation*. (The World Bank Publication No. 35999). Washington, DC: The World Bank. Retrieved December 16, 2007, from http://go.worldbank.org/X1SR1QF5M0

Trucano, M. (2007). *Quick guide to low-cost computing devices and initiatives for the developing world* [An Information for Development Program briefing sheet]. Washington, DC: InfoDev / World Bank. Retrieved December 15, 2007, from http://www.infodev.org/en/Publication.107.html

U.S. Department of Justice. (2005). *Internet crimes against children* (Office for the Victims of Crime, Publication No. NCJ 184931). Washington, DC: U.S. Department of Justice. Retrieved January 4, 2008, from http://www.ojp.usdoj.gov/ovc/publications/bulletins/internet_2_2001/NCJ184931.pdf

Virginia Department of Education. (2007). *Acceptable use policies: A handbook*. Retrieved January 8, 2008, from http://www.doe.virginia.gov/VDOE/Technology/AUP/home.shtml#filtering

Virtual Global Taskforce. (2007a). *Making the Internet a safer place*. Retrieved January 4, 2008, from http://www.virtualglobaltaskforce.com/index.asp.

Virtual Global Taskforce. (2007b). *Virtual Global Taskforce Video: Internet Safety*. Retrieved from the YouTube web server on January 4, 2008, from http://www.youtube.com/watch?v=mWWHdeR7O58

Ybarra, M., Mitchell, K.J., Finkelhor, D., & Wolak, J. (2007). Internet Prevention Messages: Targeting the right online behaviors. *Archives of Pediatrics and Adolescent Medicine, 161*, 138-145. Retrieved January 4, 2008, from http://archpedi.ama-assn.org/cgi/content/full/161/2/138

Young Adult Library Services Association. (2007). *Teens & Social Networking in School & Public Libraries: A Toolkit for Librarians & Library Workers*. Retrieved December 31, 2007, from http://www.ala.org/ala/yalsa/profdev/SocialNetworkingToolkit.pdf

Ward, A., & Wason-Ellam, L. (2005). Reading beyond school: Literacies in a neighbourhood library. *Canadian Journal of Education, 28*(1/2), 92-108. Retrieved January 7, 2008, from http://www.csse.ca/CJE/Articles/FullText/CJE28-1-2/CJE28-1-2-ward.pdf

Weiss, D.L. (2005). *The online life of teenagers*. Retrieved from the Focus on the Family web server on January 8, 2007, from http://www.family.org/socialissues/A000001156.cfm

Author Note

Since 1983, Keith McPherson has been an elementary and middle school public teacher, teacher librarian, and resource coordinator at the University of British Columbia. He is now completing his doctorate exploring the role that today's out-of-school digital information communication technologies play in shaping elementary children's literacy practices.